

Remarks

In the present response, claims 2, 8, and 17 are canceled. Claims 1, 3-7, 9-16, and 18-23 are presented for examination.

Claim Rejections: 35 USC § 112

Claims 1, 7, and 16 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention. These rejections are traversed.

The examiner argues that the term “shifter” is vague and nothing more than just a fixed lens with a fixed refractive index. Applicants respectfully disagree.

First, claims 1 and 16 do not merely recite a “shifter.” Claims 1 and 16 recite a “focal point shifter” not merely a shifter. Further, claim 7 does not even recite a “shifter” as alleged by the examiner. Claim 7 recites “means for shifting a focal point of a scanner”

Second, under 35 USC § 112, second paragraph, “(t)he primary purpose of (the) requirement of definiteness of claim language is to ensure that the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent.” See M.P.E.P. §2173. Further, M.P.E.P. §2173.02 states that:

Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

Applicants respectfully assert that, particularly in light of the description, one of ordinary skill in the art would understand what is meant by a focal point shifter as recited in claims 1 and 16 or means for shifting a focal point of a scanner as recited in claim 7.

The specification clearly discusses a “focal point shifter” and provides examples of a means for shifting a focal point of a scanner. By way of example, Fig. 1 in the specification shows a focal point shifter 108 and the specification states:

Shifter 108 is composed of glass, plastic, semiconductor crystal, or other appropriate material having an index of refraction capable of shifting focal point 105 by refractively channeling it to an area just above shifter surface 109. (See paragraph [0014]).

The specification provides further detail on the focal point shifter:

Further, while shifters 108, 208 have been described and illustrated as having a flat surface contour and an approximately rectangular shape, one of ordinary skill in the art will appreciate that the embodiments of the present invention are not limited to these shapes and contours. Rather, embodiments of shifters 108, 208 can take any shape and have any contours that are appropriate to the application and media to be scanned. For example, an embodiment may include the curving or otherwise shaping of the surface of shifter 108, 208 so that it more efficiently interfaces or matches with the scanner platen surface 104, 204, or the target surface 109, 209. Shaping shifter 108, 208 so that it acts as a lens so that the focal point of the scanner optics is further altered may also be advantageous in other embodiments. (See paragraph [0015]).

Applicants respectfully disagree with the Examiner’s assertions and traverse the rejections because claims 1, 7, and 16 are not indefinite and, thus, in compliance with § 112, second paragraph. Section 112, second paragraph, requires that the claims particularly point out and distinctly claim the subject matter that the applicant regards as his invention. To satisfy this threshold, claim recitations must allow one skilled in the art to understand the bounds of the claim when read in light of the specification. *See Exxon Research and Engineering Co. v. United States*, 60 U.S.P.Q. 2d 1272, 1276 (Fed. Cir.

2001). Thus, it is only if “a claim is *insolubly ambiguous*, and no narrowing construction can be properly adopted” can a claim be held as indefinite. *See id.* (Emphasis added). The Federal Circuit has made clear that “[i]f the meaning of a claim is discernable even though the task may be formidable and the conclusions may be one over which reasonable persons will disagree,” the claim will be viewed sufficiently clear to avoid indefiniteness. *See id.*

Clearly, one skilled would read the specification and understand the meaning of a focal point shifter and means for shifting a focal point since these claim terms are discussed at length in the specification.

Accordingly, Applicants respectfully request that the 35 U.S.C. §112, second paragraph, rejections of claims 1, 7, and 16 be withdrawn.

Claim Rejections: 35 USC § 103(a)

Claims 1-8, 10, 13-17, and 19 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,637,897 (Tsai) in view of USPN 5,359,386 (Rich). These rejections are traversed.

The claims recite one or more elements that are not taught or suggested in Tsai in view of Rich. These missing elements show that the differences between the combined teachings in the art and the recitations in the claims are great. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

As one example, independent claims 1 and 16 recite a focal point shifter interposed between a surface of a scanner and a target surface of a medium. This focal point shifter refractively shifts a focal point of light of the scanner from a point proximate to said scanner surface to a point proximate to said target surface. Independent claim 7 recites means for shifting a focal point of a scanner, the means interposed between a scanner surface and a target surface. This means also refractively moves the intended scanning area of a scanner from an area proximate to said scanner surface to an area proximate to said target surface. The examiner argues that these elements are taught in Rich. Applicants respectfully disagree.

Rich teaches an apparatus for enlarging photos from a negative. Light is projected through the negative and into a lens. The lens then projects the image onto photosensitive

paper to produce an enlarged photographic print (see column 1, lines 7-13). Nowhere does Rich teach a focal point shifter as recited in claims 1 and 16 or a means for shifting a focal point as recited in claim 7. If the examiner maintains this rejection, Applicants respectfully request the examiner to indicate the following: **What element or elements in Rich correspond to the claimed focal point shifter or means for shifting a focal point?**

Rich does teach a reflector 34 and an integrator box 49. These elements, however, are not a focal point shifter interposed between a surface of a scanner and a target surface of a medium as recited in claims 1 and 16. These elements also do not refractively shift a focal point of light of the scanner from a point proximate to a scanner surface to a point proximate to a target surface as recited in claims 1 and 16. Furthermore, these elements do not both shift a focal point of a scanner and be interposed between a scanner surface and a target surface as recited in claim 7. Further yet, these elements do not refractively move the intended scanning area of a scanner from an area proximate to a scanner surface to an area proximate to said target surface as recited in claim 7.

Rich also teaches a diffusion plate in Fig. 7. "The diffusion plate in the bottom part 58 of the negative shuttle 56 provides for a more even distribution of light 38 for projecting an image from the negative 50" (see Rich at column 5, lines 13-15). This diffusion plate, however, is not a focal point shifter interposed between a surface of a scanner and a target surface of a medium as recited in claims 1 and 16. Also, the diffusion plate does not refractively shift a focal point of light of the scanner from a point proximate to a scanner surface to a point proximate to a target surface as recited in claims 1 and 16. The diffusion plate in Rich diffuses light, not refractively shift a focal point of light. Furthermore, this diffusion plate does not both shift a focal point of a scanner and be interposed between a scanner surface and a target surface as recited in claim 7. Further yet, the diffusion plate does not refractively move the intended scanning area of a scanner from an area proximate to a scanner surface to an area proximate to said target surface as recited in claim 7. Again, the diffusion plate diffuses light, not move an intended scanning area.

The diffusion plate in Rich functions to diffuse light to more evenly distribute light. Nowhere does Rich teach or suggest that this diffusion plate shifts a focal point of

the light or moves an intended scanning area. The diffusion plate in Rich is not a “focal point shifter” but a light diffuser. So, if the diffusion plate in Rich were added to the mounting device in Tsai, then the resulting device would act to diffuse light during a scan, not shift the focal point of light during a scan.

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

Factors/Rationale Do Not Support Obviousness

In determining obviousness, neither the particular motivation to make the claimed invention nor the problem the inventor is solving controls. The proper analysis is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts. Further, although the Supreme Court in KSR cautioned against an overly rigid application of the teaching-suggestion-motivation (TSM) rationale, the Supreme Court recognized that TSM was one of a number of valid rationales that could be used to determine obviousness.

Applicants discuss examples of rationale or factors below to show that there is no finding of obviousness.

As a first factor, Applicants respectfully submit that no teaching or suggestion exists to make the combination because the references are directed to different inventions. Tsai teaches a mounting device for use with flatbed scanners. By contrast, Rich teaches a negative shuttle that includes a diffusion plate that diffuses light. In Tsai, the light is projected upwardly through the negative to scan the negative. In Rich, the light is projected downwardly through the negative and diffused to create an enlargement. The focal point of light is never shifted in either Tsai or Rich.

As a second factor, Tsai and Rich would have to be greatly modified to arrive at the claimed invention. Tsai scans a negative with light from a flatbed scanner. Rich enlarges a negative by diffusing light. Neither Tsai nor Rich shift a focal point of light. A shifting mechanism to shift the focal point of light would have to be introduced into Tsai and Rich. Such a shifting mechanism would require great modification to Tsai and Rich

since Rich teaches that the light is diffused. Diffusing the light would create great complications for also shifting a focal point to provide for a clear scan of an image on a platen.

As a third factor, the differences between the claims and the applied references are great. By way of example, claims 1 and 16 recite a focal point shifter that refractively shifts a focal point of light of the scanner from a point proximate to a scanner surface to a point proximate to a target surface. Claim 7 recites a means for shifting a focal point. This means refractively moves the intended scanning area of a scanner from an area proximate to a scanner surface to an area proximate to said target surface. By contrast, Rich teaches diffusing light, not shifting a focal point. **Diffusing light and shifting a focal point are two very different concepts.**

As a fourth factor, the Examiner is performing an improper piecemeal construction that uses hindsight to arrive at the claim elements. In other words, the Examiner is picking and choosing unrelated and isolated sentences or teachings from Tsai and Rich with hindsight of Applicants' invention to allegedly obviate the pending claims. One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Specifically, the examiner is combing unrelated elements (i.e., the light diffuser in Rich) with the mounting device for holding negatives in Tsai. The teachings for each of these elements are unrelated.

As a fifth factor, no reasonable expectation of success has been established for modifying Tsai with the teachings of Rich to arrive at the recitations of the claims. Tsai scans a negative with light from a flatbed scanner. Diffusion of light would disrupt clarity of the image being scanned. By contrast, Rich desires to achieve diffusion of light to enlarge the negative.

Furthermore, neither Tsai nor Rich shift a focal point of light. A shifting mechanism to shift the focal point of light would have to be introduced into Tsai and Rich. Such a shifting mechanism would require great modification to Tsai and Rich since Rich teaches that the light is diffused. Diffusing light and shifting a focal point of light would produce such complications as to provide no reasonable expectation of success.

These various factors show that elements in the claims are not obvious in view of the Tsai and Rich.

CONCLUSION

In view of the above, Applicants believe that all pending claims are in condition for allowance. Allowance of these claims is respectfully requested.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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